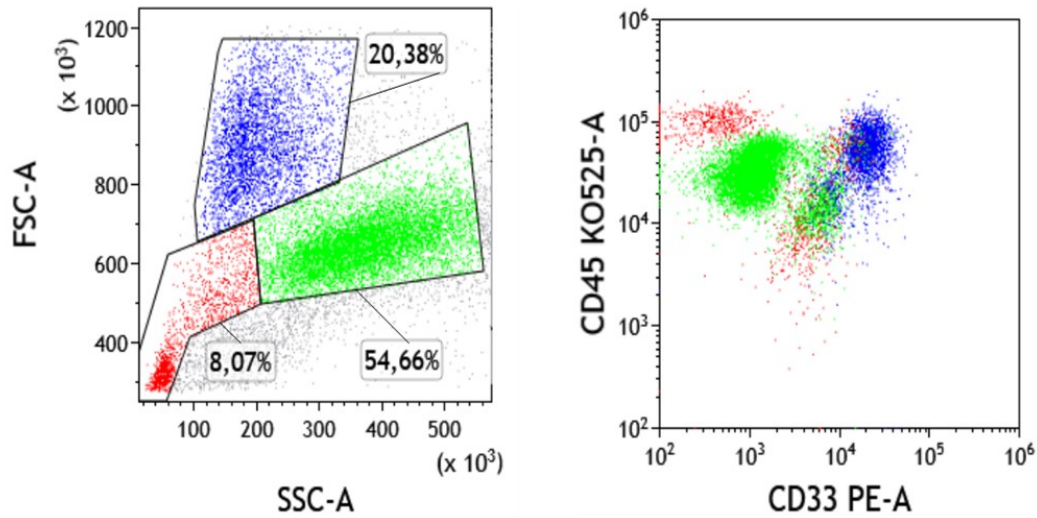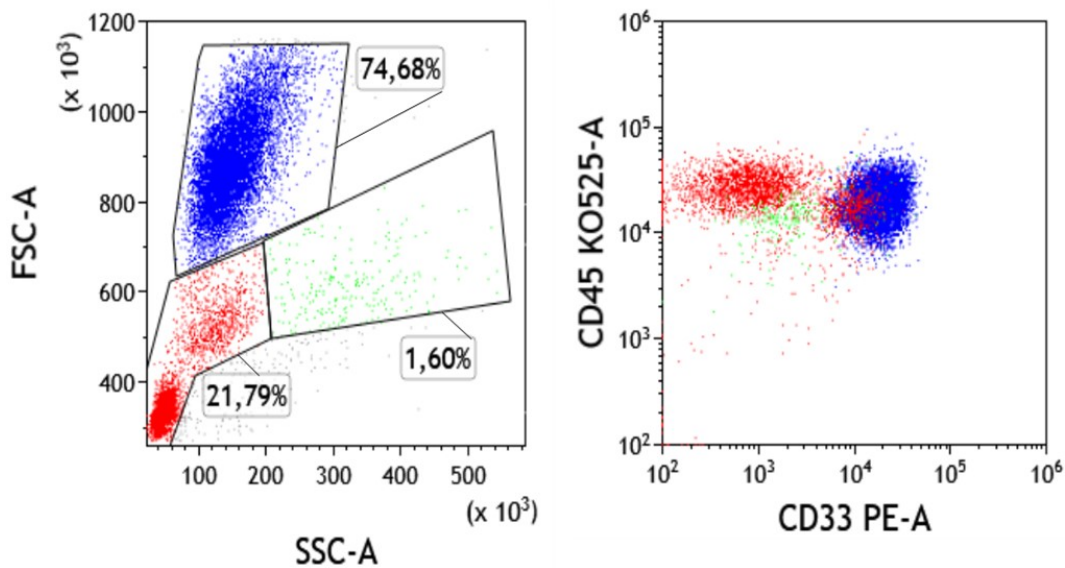**HL60 SPIKED IN WHOLE BLOOD**

AUTOMATIC PBMC ISOLATION

■ HL60 cells ■ Mononuclear cells (Lymphocytes+Monocytes) ■ Granulocytes

Additional file 1: Figure S1. Purification of mononuclear cells from a peripheral blood sample enriched with HL60 cells to gain a WBC cell density of $30x10^6$ cells/mL. HL60 (blue), Mononuclear cells (red) and Granulocytes (green)were detectable according to the FSC-A vs SSC-A dot-plot. Granulocytes' population is lost after PBMC automatic isolation, while the percentage of HL60 and mononuclear cells were enriched. CD45 vs CD33 dot-plot is shown to better identify the HL60cells that derive from CD33 positive human acute myeloid leukemia (M2).